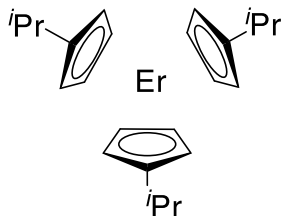


Catalog # 68-7200 Tris(i-propylcyclopentadienyl)erbium(III) (99.9%-Er) (REO)



Thermal Behavior:

- Melting point: 47°C [1], 64°C [2]
- Sublimation: 222°C (subl.)
- Boiling point (subl). 222°C/10 Torr
- TGA diagram and data is available in [2]

Technical Notes:

1. Precursor and dopant used for thin erbium film deposition.

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
Er <sub>2</sub> O <sub>3</sub>	ALD	130°C	3.7-7.5 Torr	O <sub>3</sub>	200-400°C	3
	ALD	130°C	3.7-7.5 Torr	H <sub>2</sub> O	200-400°C	3
	ALD	130°C	1 Torr	H <sub>2</sub> O	250°C	4
ZnO:Er	CVD	90°C	3.7 Torr	Et <sub>2</sub> Zn, O <sub>2</sub>	400°C	5
GaN:Er	CVD	-	20 Torr	Me <sub>3</sub> Ga, NH <sub>3</sub> , H <sub>2</sub>	1000°C	6
AlN:Er	CVD	-	22.5 Torr	Me <sub>3</sub> Al, NH <sub>3</sub> , H <sub>2</sub>	1050°C	7

References:

1. [J. Cryst. Growth, 1990, 104, 815.](#)
2. [ECS Trans. 2010, 33, 145.](#)
3. [Chem. Vap. Deposition 2014, 20, 217.](#)
4. [J. Appl. Phys. 2017, 122, 215302.](#)
5. [J. Vac. Sci. Technol. B, 2009, 27, 2248.](#)
6. [Appl. Phys. Lett. 2014, 105, 081104.](#)
7. [Opt. Mater. Express, 2015, 5, 1.](#)